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LETTER REGARDING U S EPA REGION VI REVIEW AND COMMENTS ON CLOSURE DOCUMENT FOR FIRE FIGHTING TRAINING AREA 2 NAS FORT WORTH TX
12/18/1997
TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

File: 17G
A.F.

NAVAL AIR STATION FORT WORTH JRB CARSWELL FIELD TEXAS

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 376

File: 17A-43
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

DEC 16 1997

Mr. Mark A. Weegar, Project Coordinator
Federal Facilities Team
Corrective Action Section
Pollution Control Division, MC-127
Texas Natural Resource Conservation Commission
P.O. Box 13087
Austin, Texas 78711-3087

Dear Mr. Weegar:

The Environmental Protection Agency (EPA) has reviewed the document, "Closure Document For Fire Training Area 2, SWMUs 19, 20 and 21, Naval Air Station Fort Worth Joint Reserve Base Carswell Field, Texas (formerly Carswell Air Force Base) July 1997".

Based on this review, EPA provides the following comments:

1. Although Solid Waste Management Units 19, 20 and 21 are included in the title, no description of SWMU 21 is ever given, however another SWMU, (53) is discussed in one document. Were samples collected from the area where the above ground storage tank was located?

2. The cover letter dated July 3, 1997 indicates this site has been closed to Risk Reduction Standard Number 2 (RRS 2). The data in the supporting documentation indicates constituents in environmental media at the site exceed the levels set for RRS 2 and the site will require a RRS 3 closure.

3. The cover letter and supporting documentation discuss the ground water remediation system and a phytoremediation system down-gradient. Remember the phytoremediation system is only a research and development project and is not a final remedy. The documents indicate that the TCE in the area of the FTA is not part of the larger TCE plume. If that is the case has this interim corrective action been approved by TNRCC? Has the extent of TCE been determined?

4. The cover letter and the risk assessment indicates that little or no infiltration and generation of leachate will occur because of the clay layer. There is no documentation to support this statement.

5. The 1988 sampling by Radian indicated a trend of decreasing hydrocarbon values until the sand zone was encountered. This sand zone slopes away from the site. One of the down-gradient sampling locations (12E) showed little or no detection of petroleum hydrocarbons until the sand layer was encountered. This seems to indicate additional borings should have been taken to delineate the lateral extent of the contamination.

6. Because various waste solvents were used at fire training areas in the past, additional information on VOCs and SVOCs must be provided. The risk assessment is based only on TPH and BTEX values.

7. No data from Radian sample locations 12A, 12B, 12C and only limited data from 12D is included. This site contained a valve that drains any collected liquid to a drainage ditch located to the northeast.

8. Have any confirmation samples been collected of the soil that was used to fill the site?

9. There are major concerns with the assumptions for reuse and the data used in the risk assessment. Will this property be transferred for public use? What is the future land use cited for this site? The risk assessment only assumes a grounds keeper scenario. Due to the reduced frequency and duration in the grounds keeper scenario versus a "generic" industrial worker, this scenario may not be adequately protective for future land use.

10. There are concerns with the data used in the risk assessment. The confirmation sampling for the soil backfill was based on a total BTEX analysis. Why was the soil analyzed for total BTEX only and not for the chemical-specific analysis? No justification or rationale is made for assuming that concentrations below the detection limit of total BTEX and below 100 ppm for TPH would be protective under a direct industrial scenario. Chemical concentrations cannot be predicted from BTEX and TPH analyses due to the fact that no specific class of substances were used in the fire training area, other than ignitable products.

11. It is very difficult to determine whether the risk assessment presents an accurate picture of the potential risk at the site since comparisons were made to different samples. For example:

a) BTEX and TPH constituents were assumed to be comparable to the bioremediated soils.

b) Metals and SVOC's in surface soils were compared to historical sample 12H.

c) Subsurface soils were compared to historical samples 12A, 12B, and 12C.

How do the chemical lists and concentrations in these samples compare to the other samples?

12. The risk assessment excluded certain potential exposures and pathways based on the assumption that the impermeable clay liner would remain in tact even after closure. The risk assessment eliminates the potential exposure to subsurface soil by assuming that the deed restrictions will prevent these exposures. How viable is the assumption that deed restrictions will prevent excavation in the area?

13. Additionally, the groundwater pathway was omitted from the risk assessment based on the assumption that the impermeable clay liner will remain intact. Will the deed restrictions specifically restrict any activity that would compromise the integrity of the clay liner? Will TNRCC require these specific deed restrictions? If not, it is recommended that the assumptions for the risk assessment should be revisited.

14. Proposed cleanup levels were based on 1×10^{-5} risk level. Was this a BCT decision?

15. Surface soils are not expected to be source of contamination because they were remediated. However, chemical-specific analyses were not conducted to support this assumption. Please see related general comment above.

16. It was reported that TCE was detected down gradient from the fire training area. However, no connection/exclusion with the site was made as far as source or remediation. Removing the groundwater as a potential pathway also allowed for the exclusion of this potential contaminated area.

17. A grass cover does not automatically rule out releases of fugitive dust. Nor does it eliminate the concern for surface runoff. Grass cover may reduce these releases but not eliminate them. It is recommended that these potential routes be considered.

18. The report states that there is a residential development within a one-quarter to one-half mile from the site. Will this residential development remain after property transfer? Are there any institutional controls

that would prevent exposure to potential residential receptors?

19. It is recommended that a default value of 10 be used for the absorption factor for organic compounds, unless chemical-specific values are available.

Please contact me at (214) 665-8306 should you wish to discuss this further.

Sincerely,

Gary W. Miller
Senior Project Manager
Base Closure Team

cc: Mr. Olen R. Long, (BEC/BTC)
Air Force Base Conversion Agency
Naval Air Station Fort Worth

Charles A. Rice
AFCEE

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